

Amendment to the Claims:

Please amend claims 8-23 and 88, cancel claims 3-7, 24-87 and 89-239, and add claims 240-241. The claims and their status are shown below.

1. (Original) A method for sequestering and/or removing LDL comprising contacting a medium comprising LDL with a sequestering and/or removing effective amount of a compound of chemical formula (I)

A-X-Y-Z-R₁ (I)

wherein A comprises a carboxy group or is absent;

X comprises a polyol, wherein one or more polyol hydroxyls are substituted by acyl;

Y comprises -C(=O)-, -C(=S)-, or is absent;

Z comprises O, S or NH; and

R₁ comprises a polyether.

2. (Original) The method of claim 1, wherein in the polyol acyl comprises a fatty acid(s).

3-7. (Canceled)

8. (Amended) The method of ~~claim 1 any one of claims 1-7~~, wherein the polyol comprises a (C₂-C₂₀) alkyl polyol.

9. (Amended) The method of ~~claim 1 any one of claims 1-8~~, wherein the polyol comprises about 2 to about 20 hydroxyl groups.

10. (Amended) The method of ~~claim 1 any one of claims 1-9~~, wherein the polyol is substituted with one or more acyl.

11. (Amended) The method of ~~claim 1 any one of claims 1-10~~, wherein the polyol comprises a mono- or dicarboxylic (C₂-C₂₀) alkyl polyol substituted with about 1 to about 10 hydroxyl(s).

12. (Amended) The method of ~~claim 1 any one of claims 1-11~~, wherein the polyol comprises one or more of mucic acid, malic acid, citromalic acid, alkylmalic acid, hydroxy glutaric acid derivatives, alkyl glutaric acids, tartaric acid, or citric acid.

13. (Amended) The method of claim 1 ~~any one of claims 1-12~~, wherein the polyol comprises one or more of 2,2-(bis(hydroxymethyl)propionic acid, tricine, or a saccharide.

14. (Amended) The method claim 1 ~~of any one of claims 1-13~~, wherein the polyether comprises about 2 to about 150 alkylene oxide units.

15. (Amended) The method of claim 1 ~~claims 1-14~~, wherein each alkylene oxide unit comprises straight or branched (C₂-C₄) alkylene oxide.

16. (Amended) The method of claim 1 ~~claims 1-15~~, wherein the polyether comprises an alkoxy-terminal group.

17. (Amended) The method of claim 1 ~~any one of claims 1-16~~, wherein the polyether is linked to the polyol through a linker comprising ester, thioester, or amide.

18. (Amended) The method of claim 1 ~~any one of claims 1-17~~, wherein the polyether comprises the chemic formula

R₅-(R₆-O-)_a-R₆-Q- (II),

wherein

R₅ comprises straight or branched (C₁-C₂₀) alkyl, -OH, -OR₇, -NH₂, -NHR₇, -NHR₇R₈, -CO₂H, -SO₃H (sulfo), -CH₂-OH, -CH₂-OR₇, -CH₂-O-CH₂-R₇, -CH₂-NH₂, -CH₂-NHR₇, -CH₂-NR₇R₈, -CH₂CO₂H, -CH₂SO₃H, or -O-C(=O)-CH₂-CH₂-C(=O)-O-;

R₆ comprises straight or branched divalent (C₂-C₁₀) alkylene; each R₇ and R₈ comprises, independently, straight or branched (C₁-C₆) alkylene;

Q comprises -O-, -S-, or -NR₇; and

a comprises an integer of about 2 to about 110, inclusive.

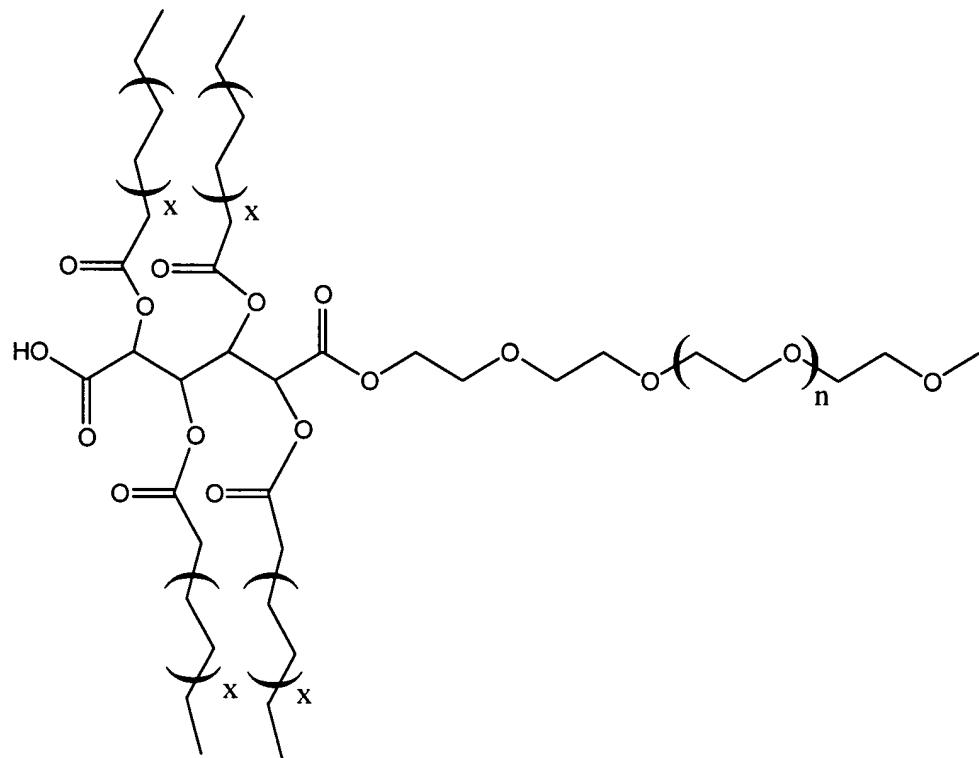
19. (Amended) The method of claim 1 ~~any one of claims 1-18~~, wherein the polyether comprises a polyethylene glycol comprising a methoxy terminal group.

20. (Amended) The method of claim 2 ~~claim 2-19~~, wherein the fatty acid(s) comprise(s) (C₂-C₂₄) fatty acid(s).

21. (Amended) The method of claim 2 ~~any one of claims 2-20~~, wherein the fatty acid(s) comprise(s) one or more of caprylic, capric, lauric, myristic,

myristoleic, palmitic, palmitoleic, stearic, oleic, linoleic, arachidic, behenic, or erucic acid.

22. (Amended) The method of claim 1 ~~any one of claims 1-21~~ wherein the compound of formula (I) has the chemical structure



(III)

wherein each x comprises, independently, 1, 2, 3, or 4; and n is about 36.

23. (Amended) The method of claim 1 ~~any one of claims 1-22~~, wherein the compound of chemical formula (I) or (II) is provided in the form of a nanoparticulate formulation.

24-87. (Cancelled)

88. (Amended) A method for treating a disease associated with pathological cells in the body of an animal, comprising administering to the animal a therapeutic agent that is associated with an amphiphilic macromolecule that targets the agent to the cells, wherein the amphiphilic macromolecule is a compound of chemical formula (I)

A-X-Y-Z-R₁ (I)wherein A comprises a carboxy group or is absent;X comprises a polyol, wherein one or more polyol hydroxyls are substituted by acyl;Y comprises -C(=O)-, -C(=S)-, or is absent;Z comprises O, S or NH; andR₁ comprises a polyether.

89-239. (Canceled)

240. (New) A method for inhibiting atherosclerosis or atherosclerotic development in an animal, comprising administering an effective amount of a compound of formula (I) as described in claim 1 to the animal.

241. (New) The method of claim 240 wherein: the polyol comprises mucic acid wherein the hydroxyls of the mucic acid are substituted by one or more fatty acids selected from caprylic, capric, lauric, myristic, myristoleic, palmitic, palmitoleic, stearic, oleic, linoleic, arachidic, behenic, and erucic acid; and the polyether comprises about 2 to about 150 alkylene oxide units and an alkoxy-terminal group.